

5. (Amended) The FRP structural material according to [any of claims] claim 1 [to 4], wherein a thickness of one core material is 20 mm or less.
6. (Amended) The FRP structural material according to [any of claims] claim 1 [to 5], wherein said FRP structural material has an FRP rib which extends in the thickness direction of said core material and which is combined integrally with said FRP skin layer.
7. (Amended) The FRP structural material according to [any of claims] claim 1 [to 6], wherein said core material comprises a foamed material.
8. (Amended) The FRP structural material according to [any of claims] claim 1 [to 7], wherein a groove is formed for distribution of a resin when an FRP skin layer is formed on a surface of at least one sheet of said core material.
10. (Amended) The FRP structural material according to [any of claims] claim 1 [to 7], wherein a net-like material is disposed at a position adjacent to a reinforcing fiber substrate of an FRP skin layer, and said FRP skin layer, said net-like material and at least one sheet of a core material are integrally molded.
14. (Amended) The FRP structural material according to [any of claims] claim 11 [to 13], wherein said seamless, enclosed hollow core material comprises a blow molded product made from a thermoplastic resin.
15. (Amended) The FRP structural material according to [any of claims] claim 11 [to 14], wherein a volume of said seamless, enclosed hollow core material is 1000 cm³ or more.
16. (Amended) The FRP structural material according to [any of claims] claim 11 [to 15], wherein a matrix resin of FRP of at least one plate is a phenol resin.

17. (Amended) The FRP structural material according to [any of claims] claim 11 [to 16], wherein a groove is defined on at least one surface of said seamless, enclosed hollow core material.

18. (Amended) The FRP structural material according to [any of claims] claim 11 [to 16], wherein a net-like material is disposed at a position adjacent to a reinforcing fiber substrate of FRP of at least one plate, and said at least one plate, said net-like material and at least said seamless, enclosed hollow core material are integrally molded.

19. (Amended) The FRP structural material according to [any of claims] claim 11 [to 18], wherein a thickness of said seamless, enclosed hollow core material is in the range of 0.5 mm to 5 mm.

20. (Amended) The FRP structural material according to [any of claims] claim 11 [to 19], wherein carbon fibers are contained as reinforcing fibers of FRP of at least one plate.

22. (Amended) The FRP structural material according to [any of claims] claim 11 [to 21], wherein a fireproof material is provided on at least one surface.

25. (Amended) The FRP structural material according to claim 23 [or 24], wherein said recessed portion is defined on each surface of said core material.

26. (Amended) The FRP structural material according to [any of claims] claim 23 [to 25], wherein said groove comprises a large groove and a small groove diverged from said large groove.

29. (Amended) The FRP structural material according to [any of claims] claim 23 [to 28], wherein said reinforcing material is disposed discontinuously in a surface direction of said FRP plate.

30. (Amended) The FRP structural material according to [any of claims] claim 23 [to 29], wherein a share strength between said flange portion of said reinforcing material and said FRP plate is not less than a tensile strength of said flange portion of said reinforcing material itself determined in the share direction thereof.

31. (Amended) The FRP structural material according to [any of claims] claim 23 [to 29], wherein a length of said flange portion of said reinforcing material “a” satisfies the following equation[.]:

$$\begin{aligned} \max (\sigma_2 \times t_2, \sigma_s \times t_s) &\geq K\tau a \\ &\geq \min (\sigma_2 \times t_2, \sigma_s \times t_s) \end{aligned}$$

[W]where, σ_2 is a tensile strength of the flange portion,
 t_2 is a thickness of the flange portion,
 σ_s is a tensile strength of the FRP plate,
 T_s is a thickness of the FRP plate,
 τ is a share strength between the flange portion and the FRP plate,
 K is a valid efficiency of connection,
“max” shows the greatest value in the parenthesis, and
“min” shows the smallest value in the parenthesis.

33. (Amended) The FRP structural material according to [any of claims] claim 23 [to 29], wherein a length of said flange portion “a” and a length of said web portion “b” of said reinforcing material satisfy the following equation[.]:

$$a/a_0 = K(b/b_0) [(t_2/t_{20}) / (t_1/t_{10})]^2$$

[W]where, t_1 is a thickness of the web portion,

t_2 is a thickness of the flange portion,

the attached character 0 is a standard value set up depending on a molding condition, and

K is a proportional constant.

34. (Amended) The FRP structural material according to [any of claims] claim 23 [to 29], wherein a length of said flange portion “a” and a length of said web portion “b” of said reinforcing material satisfy the following equation[.]:

$$a/a_0 = K (b/b_0) (t_s/t_1 + 1)^2$$

[W]where, t_1 is a thickness of the web portion or the flange portion,

t_s is a thickness of the FRP plate,

a_0 and b_0 are standard values set up depending on a molding condition, and

K is a proportional constant.

40. (Amended) The structural material according to [any of claims] claim 37 [to 39], wherein a thickness of said net-like material is 3 mm or less.

41. (Amended) The structural material according to [any of claims] claim 37 [to 40], wherein a groove is defined on said core material for forming a resin path at the time of molding.

42. (Amended) The structural material according to [any of claims] claim 37 [to 41], wherein reinforcing fibers of said reinforcing fiber substrate include a tow-like carbon fiber filamentary yarn of which filament number is in the range of 10,000 to 300,000.

43. (Amended) The structural material according to [any of claims] claim 37 [to 42], wherein said core material is formed as a hollow material.

45. (Amended) The structural material according to claim 43 [or 44], wherein said core material has a circular or rectangular cross section.

46. (Amended) The structural material according to [any of claims] claim 43 [to 45], wherein a foaming material is filled up in said core material.

49. (Amended) The process for manufacturing an FRP structural material according to claim 47 [or 48], wherein a groove is defined on a surface of a core material in contact with a reinforcing fiber substrate, and a resin is distributed along said groove as well as the resin is impregnated into the reinforcing fiber substrate.

50. (Amended) The process for manufacturing an FRP structural material according to claim 47 [or 48], wherein a net-like material is disposed between a core material and a reinforcing fiber substrate, and a resin is distributed along said net-like material as well as the resin is impregnated into the reinforcing fiber substrate.

51. (Amended) The process for manufacturing an FRP structural material according to [any of claims] claim 47 [to 50], wherein, after at least a portion disposed with a reinforcing fiber substrate is covered with a bag substrate, the inside covered with said bag substrate is evacuated, and a resin is injected to impregnate the resin into the reinforcing fiber substrate.

52. (Amended) The process for manufacturing an FRP structural material according to [any of claims] claim 47 [to 51], wherein a reinforcing fiber substrate extending in the thickness direction of the core material is disposed, and an FRP rib is formed by impregnating a resin into said reinforcing fiber substrate.

61. (Amended) The process for manufacturing an FRP structural material according to [any of claims] claim 58 [to 60], wherein a reinforcing fiber substrate is disposed on each surface of said core material, and a substrate for forming a reinforcing material is disposed so as to extend between both reinforcing fiber substrates.

62. (Amended) The process for manufacturing an FRP structural material according to [any of claims] claim 58 [to 61], wherein a resin distribution path of said core material is communicated with said recessed portion, and said substrate for forming a reinforcing material is integrally molded by introducing said injected resin into the recessed portion.

66. (Amended) The process for manufacturing an FRP structural material according to claim 64 [or 65], wherein a hollow core material is used as said core material.

67. (Amended) The process for manufacturing an FRP structural material according to [any of claims] claim 64 [to 66], wherein said reinforcing fiber substrate is disposed over the entire circumference of said core material.